

IDS GeoRadar RIS Hi-Pave

Ground penetrating radar for road and airport pavement assessment



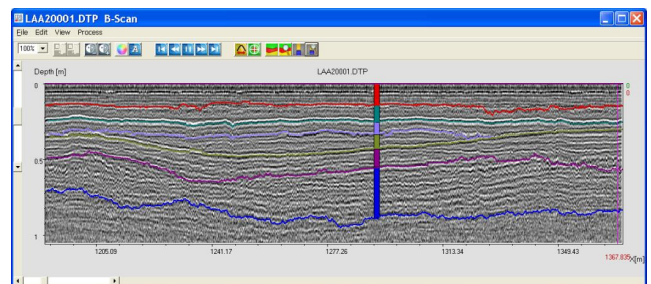
IDS GeoRadar RIS Hi-Pave is a specialist ground penetrating radar system for assessing road and runway pavements. Air-launched horn antennas acquire data without touching the surface in a vehicle-mounted configuration. The resulting profiles support investigation of pavement layers, thickness variations and changes requiring further diagnosis. Antennas, control units, positioning and software are selected for the intended survey. We provide an individual quotation for the agreed configuration.

Configuration and price on request

Applications and workflow

Ground penetrating radar for road and airport pavement assessment

Acceptance surveys and periodic pavement assessment on roads, runways and taxiways. Investigate the layer structure and anomalies that may indicate voids, delamination or moisture, then compare the findings with design records and targeted ground truth. Interpretation depends on material properties and survey conditions.



Non-contact pavement measurement

HR1000 and HR2000 horn antennas operate above the surveyed surface. With an appropriate vehicle mounting, the configuration can acquire continuous profiles along a route. Antenna height, mounting geometry and acquisition settings must be selected for the particular survey arrangement.

A configuration suited to the layers

The system can combine antennas of different frequencies with DAD MCh Fast Wave control units. The manufacturer datasheet describes configurations with up to six channels. We confirm the antenna, channel and controller combination in the quotation, based on the required resolution and investigation scope.

Applications and workflow

Plan the survey route, select the antennas and establish distance and position recording. After acquisition, interpret layer boundaries, calibrate the interpretation with available core data and relate observations to the route. The results help select locations for further verification and prepare survey documentation.

Selected specifications

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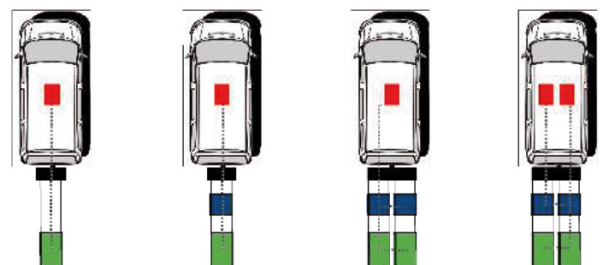
Air-launched horn antennas	HR1000: 1 GHz; HR2000: 2 GHz
Maximum number of channels	Up to 6, for the configuration in the manufacturer datasheet
Maximum acquisition speed	Up to 250 km/h at 10 scans/m and 512 samples; configuration-dependent
Distance and position recording	Measuring wheel and/or GPS interface; NMEA
Protection rating stated in the datasheet	IP65
Export formats stated in the datasheet	Excel, ASCII, HDF5, JPG, BMP

Configuration and offer scope

The quotation covers a defined configuration. We confirm antennas, channels, control units, mounting, positioning, computer and licences. Photographs show example manufacturer arrangements; the vehicle and every accessory visible in an image are not automatically included in the supplied equipment.

From radargrams to layer assessment

GREDD 3D provides layer tracking, core-data input and propagation-velocity estimation. Linking profiles with GPS positions helps relate the interpretation to chainage and observation locations. Processing tools support the analysis; a specialist must review the resulting assessment.



Up to 250 km/h is an acquisition parameter specified at 10 scans/m and 512 samples, subject to configuration. It is not a recommended driving speed. Investigation depth, resolution and anomaly recognition depend on material properties, geometry and measurement conditions.

Choose equipment for your work

GPR systems: configuration advice, demonstrations and individual quotations.



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